

Rh Laboratory

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December 15th, 1975.

Dr. Walter F. Bodmer,
Professor of Genetics,
Genetics Laboratory,
Department of Biochemistry,
University of Oxford,
South Parks Road,
Oxford OX1 3QU.

Dear Dr. Bodmer,

Thank you for the copy of the Report on Chromosome 6 which arrived in today's mail; I think you have done an admirable job of collating the material. I have only two comments to make:

1. I would prefer that the lod scores from the enclosed MS, which was submitted to Dr. McKusick on October 30th, be used for HLA-GLO in Table II. When I returned home from the Baltimore meeting a good many more results were in and so they are included. The current scores do not alter the probable map distance but are, I think, important because they confirm that the recombination fraction is apparently not sex-dependent. On this point, finally, and at the risk of appearing chauvinistic I would prefer that the source in Table II be shown as Seattle-Wpg: the families are all Canadian as indicated in the enclosed MS and our recognition of HLA-GLO linkage was the result of routine linkage analyses. I am sure Elo would not object.
2. As to the positioning of GLO - if it lies between PGM₃ and HLA it must be very close to PGM₃ and to allow for the sex difference for recombination in males and females for HLA-PGM₃ one would almost have to postulate an obligatory crossing-over point between GLO and PGM₃ in females only. This could reconcile Weitkamp's and Kompf's observations if Kompf's material is largely derived from females. If, on the other hand, there is much paternal information in Kompf's material it is surprising that his scores form such a nice smooth curve when drawn out; this makes me a little nervous.

I realize that you have weighed all of this and left the positioning of GLO open as shown in Map(c), and that the report is supposed to deal with the information available at the meeting. But it would seem to me worthwhile to learn from Kompf the sex source of his information and from Lowell the GLO-Pg5 situation. You see I have a vague recollection

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that Lowell said in Baltimore that GLO- Pg5 scores were negative, although it may be that he said that they were not informative. The only GLO scores I saw of Lowell's were those for GLO-HLA.

I know you are working against that bothersome thing called DEADLINE and the comments I have made do not indicate mistakes or misrepresentations, neither of which I can find. Gil Cote has deserted us for marriage in Greece so I cannot discuss the lod score puzzles with him which might have saved me the embarrassment of missing something obvious which I cannot see. If you do learn anything from Lowell or Kompf I would be very interested to hear about it.

With best regards,

Sincerely,

Marion Lewis,
Assistant Professor,
Dept. of Pediatrics.

cc Dr. V. McKusick
Dr. J. Hamerton

MS sent previously